

WHAT IS CLAIMED IS:

1 1. A system for combining narrowband and broadband
2 transport mechanisms in a communications network,
3 comprising:

4 a call control node including switching
5 intelligence and narrowband switching fabric;

6 a plurality of connection control nodes each
7 including broadband switching fabric; and

8 an intermediate node operatively connectable to
9 said call control node and said plurality of connection
10 control nodes, said intermediate node including a
11 plurality of call processors adapted to interwork between
12 said call control node and said plurality of connection
13 control nodes;

14 wherein said call control node further includes
15 a load distribution function adapted to distribute the
16 load amongst said plurality of call processors.

1 2. The system of Claim 1, wherein said plurality of
2 connection control nodes comprise at least part of a
3 broadband network.

1 3. The system of Claim 1, wherein said load
2 distribution function is further adapted to assign one of
3 said plurality of call processors to a call.

1 4. The system of Claim 3, wherein said load
2 distribution function is further adapted to assign said
3 assigned call processor on a round-robin basis.

1 5. The system of Claim 3, wherein said load
2 distribution function is further adapted to assign said
3 assigned call processor using load information related to
4 the load on each of said plurality of call processors.

1 6. The system of Claim 3, wherein said assigned call
2 processor is adapted to encode a message sent from said
3 call control node to a selected one of said connection
4 control nodes for the call.

1 7. The system of Claim 6, wherein said assigned call
2 processor is further adapted to decode a message sent from
3 said selected connection control node to said call control
4 node.

1 8. The system of Claim 6, wherein each of said
2 plurality of connection control nodes has a transport link
3 to a linked one of said plurality of call processors.

1 9. The system of Claim 8, wherein said assigned call
2 processor is further adapted to pass said encoded message
3 to said linked call processor associated with said
4 selected connection control node for transmission of said
5 encoded message to said selected connection control node.

1 10. The system of Claim 9, wherein said linked call
2 processor associated with said selected connection control
3 node is further adapted to receive a message from said
4 selected connection control node to said call control node
5 and decode said message.

1 11. The system of 10, wherein said linked call
2 processor associated with said selected connection control
3 node is further adapted to pass said decoded message to
4 said assigned call processor for transmission of said
5 decoded message to said call control node.

1 12. The system of Claim 8, wherein said transport
2 link is a signaling ATM adaptation layer transport link.

1 13. The system of Claim 1, wherein each call
2 processor of said plurality of call processors implements
3 a gateway control protocol that encodes and decodes
4 messages according to the H.248 standard.

1 14. The system of Claim 1, wherein said call control
2 node is a legacy switch and said intermediate node is a
3 mediation logic node, said legacy switch and said
4 mediation logic node together forming a media gateway
5 controller.

1 15. The system of Claim 14, wherein said plurality
2 of connection control nodes are media gateways within an
3 ATM network.

1 16. In a communications system for using a plurality
2 of call processors within an intermediate node for a call
3 being handled by a call control node including switching
4 intelligence and narrowband switching fabric and a
5 selected one of a plurality of connection control nodes
6 including broadband switching fabric, said plurality of
7 call processors for interworking between said call control
8 node and said selected connection control node, said call
9 control node comprising:

10 a load distribution function for distributing the
11 load amongst said plurality of call processors and
12 assigning one of said plurality of call processors to the
13 call.

1 17. The call control node of Claim 16, wherein said
2 load distribution function is further adapted to assign
3 said assigned call processor on a round-robin basis.

1 18. The call control node of Claim 16, wherein said
2 load distribution function is further adapted to assign
3 said assigned call processor using load information
4 related to the load on each of said plurality of call
5 processors.

1 19. The call control node of Claim 16, wherein said
2 call control node is a legacy switch and said intermediate
3 node is a mediation logic node, said legacy switch and
4 said mediation logic node together forming a media gateway
5 controller.

1 20. A method for combining narrowband and broadband
2 transport mechanisms in a communications network,
3 comprising the steps of:

4 providing a call control node including switching
5 intelligence and narrowband switching fabric, a plurality
6 of connection control nodes, each including broadband
7 switching fabric, and an intermediate node having a
8 plurality of call processors for interworking between said
9 call control node and said plurality of connection control
10 nodes; and

11 distributing the load amongst said plurality of
12 call processors.

1 21. The method of Claim 20, wherein said step of
2 distributing further comprises the step of:

3 assigning one of said plurality of call
4 processors to a call.

1 22. The method of Claim 21, wherein said step of
2 assigning further comprises the step of:

3 assigning said assigned call processor on a
4 round-robin basis.

1 23. The method of Claim 21, wherein said step of
2 assigning further comprises the step of:

3 assigning said assigned call processor using load
4 information related to the load on each of said plurality
5 of call processors.

1 24. The method of Claim 21, further comprising the
2 step of:

3 encoding a message sent from said call control
4 node to a selected one of said connection control nodes
5 for the call at said assigned call processor.

1 25. The method of Claim 24, further comprising the
2 step of:

3 decoding a message sent from said selected
4 connection control node to said call control node at said
5 assigned call processor.

1 26. The method of Claim 24, wherein each of said
2 plurality of connection control nodes has a transport link
3 to a linked one of said plurality of call processors, and
4 further comprising the steps of:

5 passing said encoded message from said assigned
6 call processor to said linked call processor associated
7 with said selected connection control node; and

8 transmitting said encoded message from said
9 linked call processor associated with said selected
10 connection control node to said selected connection
11 control node.

1 27. The method of Claim 26, further comprising the
2 steps of:

3 receiving a message from said selected connection
4 control node to said call control node at said linked call
5 processor associated with said selected connection control
6 node; and

7 decoding said message at said linked call
8 processor associated with said selected connection control
9 node.

1 28. The method of 27, further comprising the steps
2 of:

3 passing said decoded message from said linked
4 call processor associated with said selected connection
5 control node to said assigned call processor; and

6 transmitting said decoded message from said
7 assigned call processor to said call control node.

1 29. A method for using a plurality of call processors
2 within an intermediate node for a call being handled by a
3 call control node including switching intelligence and
4 narrowband switching fabric and a selected one of a
5 plurality of connection control nodes including broadband
6 switching fabric, said plurality of call processors for
7 interworking between said call control node and said
8 selected connection control node, said method comprising
9 the steps of:

10 providing a load distribution function within
11 said call control node for distributing the load amongst
12 said plurality of call processors; and

13 assigning one of said plurality of call
14 processors to the call using said load distribution
15 function.

1 30. The method of Claim 29, wherein said step of
2 assigning further comprises the step of:
3 assigning said assigned call processor on a
4 round-robin basis.

1 31. The method of Claim 29, wherein said step of
2 assigning further comprises the step of:
3 assigning said assigned call processor using load
4 information related to the load on each of said plurality
5 of call processors.

1 32. The method of Claim 29, further comprising the
2 step of:
3 encoding a message sent from said call control
4 node to said selected connection control node at said
5 assigned call processor.

1 33. The method of Claim 32, further comprising the
2 step of:

3 decoding a message sent from said selected
4 connection control node to said call control node at said
5 assigned call processor.

1 34. The method of Claim 32, wherein each of said
2 plurality of connection control nodes has a transport link
3 to a linked one of said plurality of call processors, and
4 further comprising the steps of:

5 passing said encoded message from said assigned
6 call processor to said linked call processor associated
7 with said selected connection control node; and

8 transmitting said encoded message from said
9 linked call processor associated with said selected
10 connection control node to said selected connection
11 control node.

1 35. The method of Claim 34, further comprising the
2 steps of:

3 receiving a message from said selected connection
4 control node to said call control node at said linked call
5 processor associated with said selected connection control
6 node; and

7 decoding said message at said linked call
8 processor associated with said selected connection control
9 node.

1 36. The method of 35, further comprising the steps
2 of:

3 passing said decoded message from said linked
4 call processor associated with said selected connection
5 control node to said assigned call processor; and

6 transmitting said decoded message from said
7 assigned call processor to said call control node.